

1851.

LIST OF PRICES  
OF THE  
APPARATUS, MATERIALS,  
AND  
CHEMICAL PREPARATIONS  
REQUIRED IN THE PRACTICE OF THE VARIOUS

PHOTOGENIC PROCESSES,  
AS APPLIED TO PAPER  
AND REFERRED TO IN PART I. OF  
PHOTOGENIC MANIPULATION,

BY  
ROBERT J. BINGHAM,

MANUFACTURED AND SOLD BY  
GEORGE KNIGHT AND SONS,  
PHILOSOPHICAL INSTRUMENT MAKERS,  
FOSTER LANE, LONDON.

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**CAMERAS.**

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Fig. 6, page 34.

This is the simplest form of Camera, consisting of a mahogany box with ground focusing-glass, dark frame for the prepared paper, mounted with a miniscus lens, producing pictures 4 in. by 6 in. . . . . £2 2s.

## CUNDELL'S IMPROVED CALOTYPE CAMERA.

Page 35.

It consists of a Sliding Mahogany Box, having a graduated scale attached to the inner portion, for the purpose of adjusting the optical to the chemical focus; with ground focusing glass, two dark frames for the sensitive paper, and mounted with a miniscus lens in brass mount; taking pictures. 7 in. by 5 in.  
£3 3s.

## PORTABLE FOLDING CAMERA.

Fig. 7, page 40.

This is the most convenient form of travelling Camera, packing up into a very small compass. It consists of a Mahogany Box, the sides of which fold inwards; ground focusing glass, two improved double dark frames for the sensitive paper, and fitted with achromatic lens in brass sliding adjustment,—the whole being packed in a small box.

|                              |                        |         |
|------------------------------|------------------------|---------|
| No. 1, adapted for pictures, | 4½ in. by 6½ in. . . . | 4l. 4s. |
| No. 2, „                     | 6 in. by 8 in. . . .   | 6l. 6s. |
| No. 3, „                     | 8 in. by 10 in. . . .  | 9l. 9s. |

## PORTABLE FOLDING CAMERA,

On the best construction, with two double dark frames for the sensitive paper, focusing glass, and mounted with the No. 3 Voigtlander set of achromatic lenses, adapted for either views or portraits; taking pictures. 8 in. by 6 in. The whole packed in portable case, with lock and key . . . . £23

The above Cameras, with the exception of the last, being fitted only with single achromatic lenses, are chiefly intended for taking views, copying pictures, or other inanimate objects. For the purpose of portrait taking from life, where quickness is a great desideratum, a double combination of lenses is necessary. When therefore, the Camera is required for both purposes, any of the following may be added, increasing the expense by the cost of the lens selected, and a slight addition for adapting the Camera to both set of glasses.

# IMPROVED DOUBLE ACHROMATIC LENSES, MANUFACTURED BY VOIGTLANDER AND SON, VIENNA.

From Calculations made by Professor PETZVAL.

GEORGE KNIGHT & SONS, Sole Agents for the  
United Kingdom.

The portraits produced by these lenses are unrivalled. They are therefore well worth the slight additional cost.

No. 1 consists of a combination of Achromatic Lenses, of the respective diameters of  $1\frac{1}{2}$  in. and  $1\frac{5}{8}$  in., with full aperture, the combined focus being  $3\frac{5}{8}$  in., handsomely mounted in brass, with rack and pinion adjustment, suited for portraits up to the size of 4 in. by 3 in. . . . . £6 6s.

No. 2 consists of a combination of Achromatic Lenses, of the respective diameters of 2 in. and  $2\frac{1}{8}$  in., with full aperture, the combined focus being 7 in., handsomely mounted in brass, with rack and pinion adjustment, suited for portraits up to the size of  $5\frac{1}{2}$  in. by 4 in. This lens is well adapted for portraits, whole-length figures, groups, and it is provided with a diaphragm or stop, to be fixed in front of the first glass when views, &c. are taken. . . . . £10

No. 3. consists of a combination of Achromatic Lenses of the respective diameters of  $3\frac{1}{8}$  in. and  $3\frac{1}{16}$  in., with full aperture, the combined focus being  $7\frac{1}{2}$  in., handsomely mounted in brass, with rack and pinion adjustment, suited for portraits up to the size of  $6\frac{1}{2}$  in. by  $4\frac{3}{4}$  in. This lens is well adapted for taking portraits, figures, and groups; it possesses advantages over the smaller size lenses, admitting a greater quantity of light, and consequently acting quicker. The increased distance from the Camera of the object taken causes the proportions to be better preserved. This lens is provided with a diaphragm, which is fixed in front of the first glass when views of landscapes are taken . . . . £19

## LENSES, No. 4 AND 5.

These lenses, which have only very lately been introduced by Messrs. Voigtlander and Son, possess very considerable advantages, and will be found invaluable to the professional artist, &c.

No. 4 consists of a combination of Achromatic Lenses of the

respective diameters of  $2\frac{11}{16}$  in. and  $3\frac{1}{8}$  in., with full aperture, the combined focus being only  $2\frac{1}{2}$  in. ; handsomely mounted in brass, with rack and pinion adjustment ; suited for portraits to the size of  $3\frac{1}{4}$  in. by  $2\frac{3}{4}$  in. The short focus, combined with the large aperture of this lense, enables it to command an intensity of light four times greater than any other, at the same time its defining power is unequalled. It is admirably suited for taking portraits in private rooms and other places not generally adapted for the purpose, as also portraits of children. Good pictures can be produced with it in bad weather and on dull days, when other lenses would be useless ; it is provided with a diaphragm for views . £23

No. 5. This matchless lens consists of a combination of Achromatics, of the respective diameters of 3 in. and  $3\frac{1}{8}$  in. full aperture, the combined focus being  $5\frac{7}{8}$  in., handsomely mounted in brass, with rack and pinion adjustment. This lens, which is of similar construction to the No. 4, is, when used with its full aperture, capable of perfectly taking a portrait the size of  $6\frac{1}{2}$  in. by  $4\frac{3}{4}$  in. It commands an immense power of light, working in a third less time than the No. 1, 2, and 3 lenses. With the 2 in. diaphragm the light is less, but it works sharper to the edges of the picture. By a recent addition to this instrument, the first lens of the combination can be used alone for inanimate objects, views, copying pictures, &c. For this purpose it must be unscrewed from the body and screwed into the separate brass plate, the deep diaphragm simply slid over it ; it is then fixed to a larger Camera, the focus of the single lens being longer, it produces magnificent pictures 8 in. by 6 in. . . . . £35

No. 6. Consists of a combination of achromatic lenses of the respective diameters of  $4\frac{1}{8}$  and  $4\frac{5}{16}$  in., mounted in brass, the combined focus being 10 in. The above powerful combination is capable of taking a clearly defined picture of the size of 12 in. square £45

No. 7. Single achromatic lense,  $2\frac{1}{8}$  in. diameter, 13 in. focus, in brass mounting, with different sized diaphragms, adapted for views on plates or paper,  $7\frac{1}{2}$  in. square . . . . .

In all these lenses the focus is measured from the back lense to the ground glass, an image being received on the latter from a distant object.

## COMPOUND ARRANGEMENTS OF ACHROMATIC LENSES OF LESS EXPENSIVE MANUFACTURE,

For taking Portraits.

Improved Combination of Achromatic Lenses,  $1\frac{3}{4}$  in. diameter, combined focus,  $4\frac{1}{2}$  in.; handsomely mounted in brass, with rack and pinion adjustment, for portraits,  $3\frac{1}{4}$  in. by  $2\frac{3}{4}$  in. . £4 4s.

Improved Combination of Achromatic Lenses,  $2\frac{1}{4}$  in. diameter, combined focus, 8 in.; handsomely mounted in brass, with rack and pinion adjustment, for portraits,  $6\frac{1}{2}$  in. by  $4\frac{3}{4}$  in. £6 16s. 6d.

Combination of Achromatic Lenses,  $3\frac{1}{4}$  in. diameter, combined focus, 10 in.; handsomely mounted in brass, with rack and pinion adjustment, for portraits, up to  $8\frac{1}{2}$  in. by  $6\frac{1}{2}$  in. £15 0s.

## STANDS FOR THE SUPPORT OF CAMERAS.

These are always made of the tripod form to insure steadiness, which is of great importance; they are also generally required to be made portable for travelling, or carrying in the hand.

No. 1. This stand is made in oak, very substantial and steady, and well adapted for the portrait-room of the professor or amateur  
18s.

No. 2. Knight's Improved Universal Tripod-Stand. It has been endeavoured in this stand to combine the advantages possessed by all others; it can be elevated or depressed at pleasure, is furnished with an iron ball-and-socket joint, and is very firm; the legs being moveable, it can be used upon uneven ground £2 10s. 6d.

No. 3. Ditto, with jointed legs . . . £2 12s. 6d.

No. 4. French pattern Camera-Stand, in walnut or mahogany, with open jointed legs, boxwood ball-and-socket joint. This is an excellent stand for the travelling photographer, and can be used upon uneven ground . . . £2 5s.

No. 5. Same as No. 4, with plain legs, and made somewhat slighter—is a good stand for small Cameras . . . £1 5s.

No. 6. Photographic Stand for taking Views. In taking views, buildings, &c. the camera should always be kept in an horizontal position; hence the ball-and-socket joint, elevating screw, &c. are not necessary.

The view-stand consists of a light triangle, either of wood or metal. This fixes to the Camera by means of a screw. The legs, which are 4 feet 6 in. long, are made of hickory, remarkably light but very strong; and, when detached from the triangle, fold together, forming a convenient walking-staff . . . £2 2s.

#### HEAD RESTS,

For keeping the head of the sitter steady; this being essential to a good Portrait.

Simplest form, Fig. 11, page 51 . . . 6s. 6d.

Improved Universal ditto . . . £1 0d.

The above are readily attached to any chair.

Claudet's Improved Head-Rest, with black velvet seat, and universal adjusting head piece . . . £2 5s.

Beard's Universal Head-Rest, mounted on heavy iron foot, with sliding telescopic adjusting tube. This rest standing on the ground is used entirely without the aid of a chair, and is useful for fixing the head when the subject is in a standing position . . . £3 3s.

#### PHOTOGENIC PRESSURE FRAMES FOR PRODUCING POSITIVE PICTURES. Fig. 4, Page 28.

No. 1, 4½ in. by 5½ in. . . 6s. 0d.

No. 2, 6 in. by 9 in. . . 8s. 6d.

No. 3, 8½ in. by 11 in. . . 12s. 0d.

IMPROVED FORM, Fig. 5, Page 29. According to size.

## ECONOMICAL STILL,

With Refrigerator for the Distillation of Water Fig. 2, Page 19.

|                             |             |
|-----------------------------|-------------|
| 1 Gallon capacity . . . . . | 17. 1s. 0d. |
| 2    "    "    . . . . .    | 17. 7s. 6d. |

## SHALLOW PORCELAIN DISHES,

With flat bottoms, for containing the Solutions and preparing the Paper. Fig. 3, Page 21.

|   |         |
|---|---------|
| No. 1, $2\frac{3}{4}$ by 4 in. . . . .  | 1s. 0d. |
| No. 2, 5 by 7 in. . . . .               | 1s. 6d. |
| No. 3, 7 by 9 in. . . . .               | 2s. 0d. |
| No. 4, $7\frac{1}{2}$ by 10 in. . . . . | 2s. 6d. |
| No. 5, 11 by 14 in. . . . .             | 4s. 6d. |

|   |                |
|---|----------------|
| Shallow Dish of Plate-Glass for applying the Sensitive Solution . . . . . | 25s. 0d.       |
| In Porcelain . . . . .  | 2s. 6d.        |
| Levelling Stands for the above . . . . .                                  | 5s. & 12s. 0d. |

## BROAD CAMEL'S HAIR BRUSHES,

Made without metal, for applying the Solutions to the Paper.

|           |          |           |          |          |                        |
|-----------|----------|-----------|----------|----------|------------------------|
| <u>1½</u> | <u>2</u> | <u>2½</u> | <u>3</u> | <u>4</u> | <u>5 inches broad.</u> |
| 1s. 6d.   | 1s. 9d.  | 2s. 3d.   | 2s. 6d.  | 3s. 6d.  | 4s. 6d. each.          |

## OWEN'S ISOMADESER.

A new contrivance for applying the solutions evenly, and developing the latent image. This instrument being constructed wholly of glass, entirely prevents decomposition, and the constant expense of new brushes . . . . . £1 4s.

## HOT WATER APPARATUS,

For Drying the Picture. Fig. 13, Page 54. . . . . 14s.

## STEAM APPARATUS,

For assisting the Development of the Picture. Fig. 12, Page 53. 21s.

## SUPERIOR PAPER,

Manufactured by the best Makers, adapted for Photogenic Drawings.

|   |         |
|---|---------|
| Whatman's Superfine Satin Post, per quire | 2s. 6d. |
| Stout hard-rolled                         | 6s. 0d. |
| Turner's                                  | 3s. 0d. |
| Canson Frères :                           |         |
| Negative                                  | 3s. 0d. |
| Positive                                  | 4s. 6d. |
| White Bibulous                            | 1s. 3d. |

Frames and Mountings of every description for finished Pictures.

**Pure Chemical Preparations required in Photography  
as applied to Paper and Plates of Glass.**

|                          | s. | d. |                          | s. | d. |
|--------------------------|----|----|--------------------------|----|----|
| Ammonia .....lb.         | 2  | 0  | Iron :                   |    |    |
| Acids :                  |    |    | Proto-sulphate ....      | 0  | 3  |
| Acetic, glacid ....oz.   | 1  | 0  | Ammonio-citrate ..       | 1  | 0  |
| Gallic.....              | 3  | 6  | Potassium :              |    |    |
| Pyro-Gallic...per bottle | 1  | 0  | Bromide .....            | 4  | 6  |
| Nitric .....oz.          | 0  | 3  | Cyanide.....             | 0  | 8  |
| Succinic.....            | 3  | 6  | Iodide .....             | 2  | 0  |
| Sulphuric .....          | 0  | 3  | Ferro-cyanuret ....      | 0  | 3  |
| Æther: Sulphuric ..      | 1  | 0  | Chlorate .....           | 0  | 3  |
| Bromine .....            | 4  | 0  | Isinglass .....          |    |    |
| Collodion .....          | 2  | 0  | Silver :                 |    |    |
| Copper, sulphate ....    | 0  | 3  | Nitrate, crystallized .. | 5  | 0  |
| Iodine .....             | 1  | 6  | Iodide .....             |    |    |
| Re-sublimed .....        | 2  | 0  | Soda :                   |    |    |
| Tincture .....           | 1  | 0  | Hypo-sulphite ....       | 3  | 6  |
|                          |    |    | Fluate .....             | 2  | 0  |